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The National Information Exchange Model and making data relevant

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The National Information Exchange Model and making data relevant

Abstract

The National Information Exchange Model (NIEM) has been widely adopted as a basis for creating standards that foster information exchanges across disparate disciplines in justice, health, human services and other fields. NIEM can be a driver for transforming legacy data into meaningful cross-disciplinary exchanges that can support advanced analysis of impacts of programs and strategies in improving government services of all categories. This presentation will review the basic NIEM principles in terms of how they can enable more meaningful results as administrative data is applied to research on the efficacy of government services across organizations and disciplines.

Comments

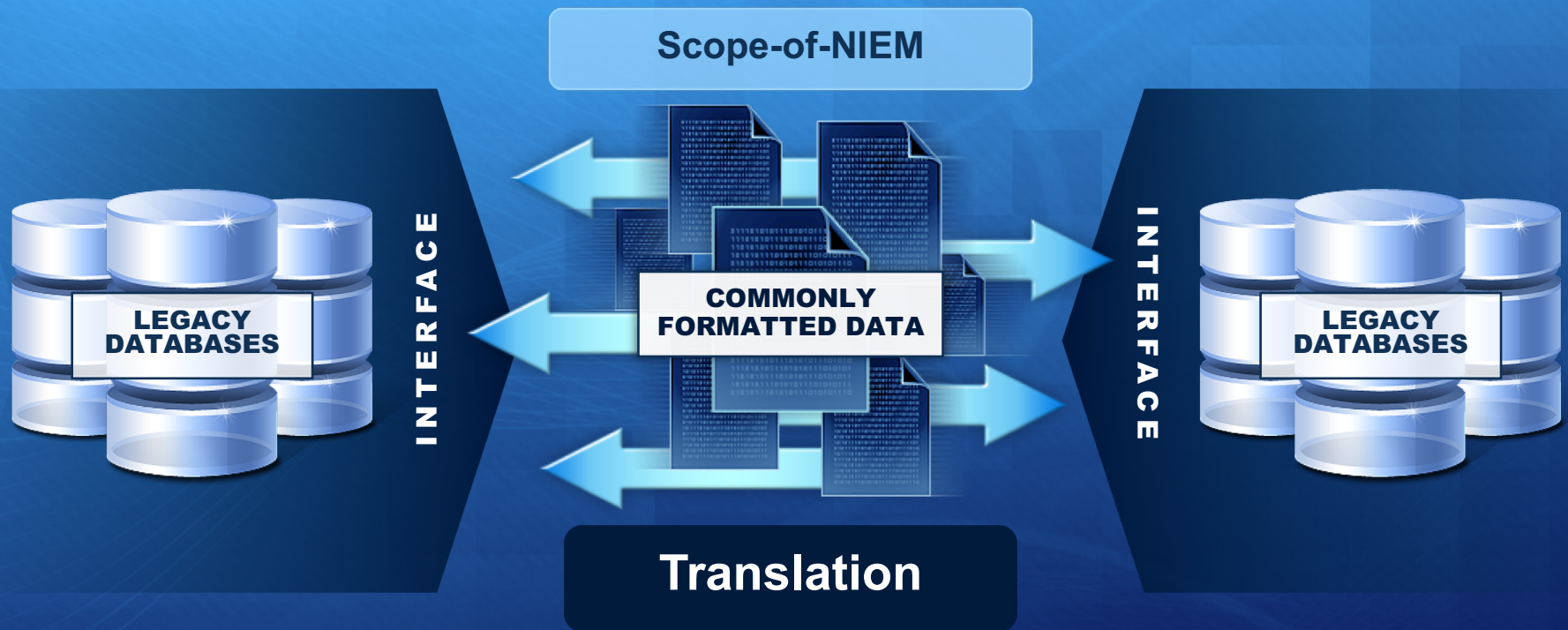
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And leveraging administrative data

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Standardizing Data Moving Across Systems



NIEM intentionally does not address standardizing data inside legacy systems. NIEM serves as a translation layer (providing a common understanding) between and across disparate systems.

What NIEM Is...

A Standard that facilitates information sharing:

- ❑ Across organizational and jurisdictional boundaries
- ❑ At all levels of government

A Structured Approach that provides:

- ❑ Development tools, processes, and methodologies

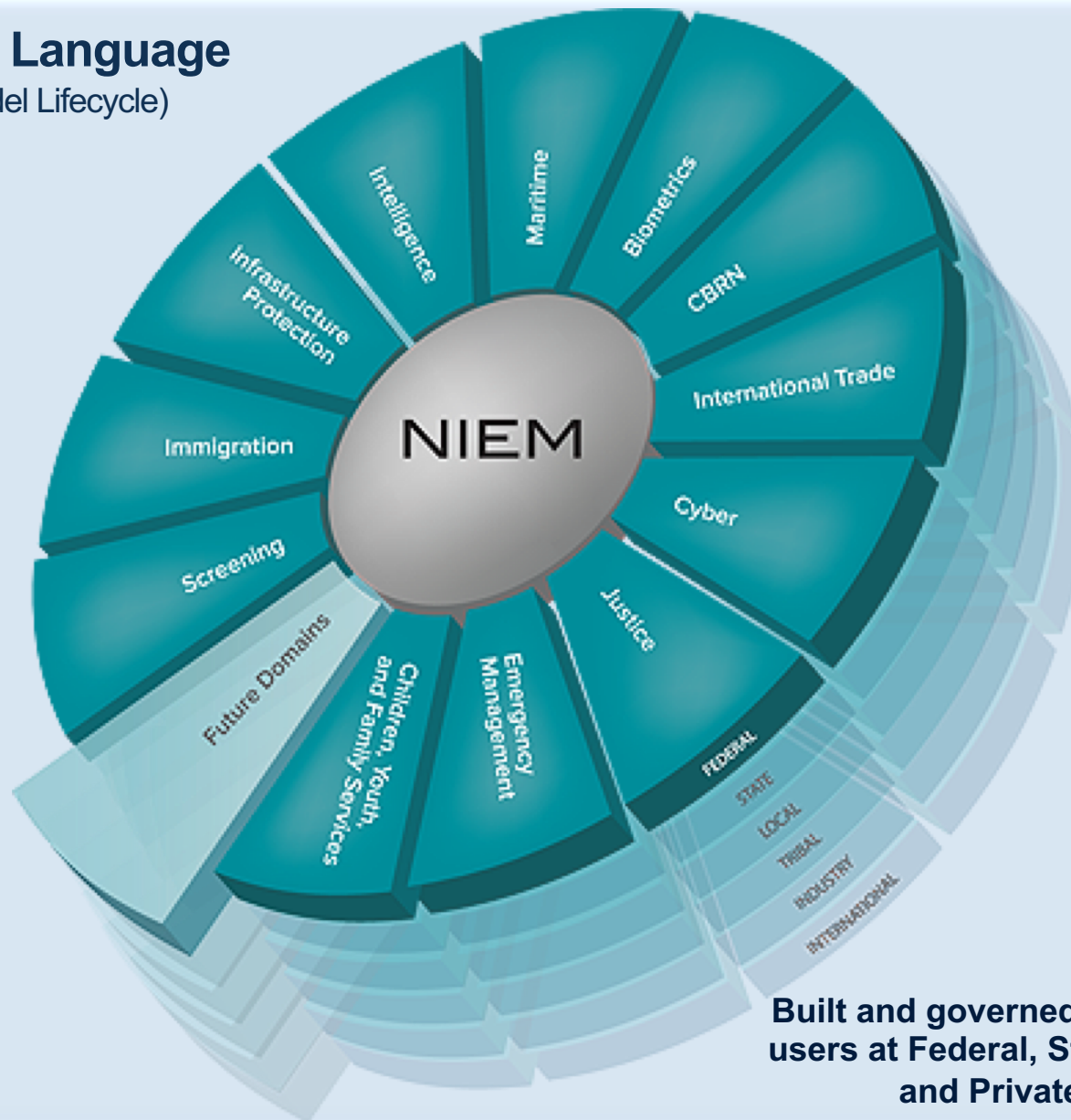
A Data model that provides:

- ❑ Agreed-upon terms, definitions, and formats for various business concepts
- ❑ Agreed-upon rules for how those concepts fit together
- ❑ Independence from how information is stored in individual agency systems

NIEM Domains

Common Language

(Data Model Lifecycle)

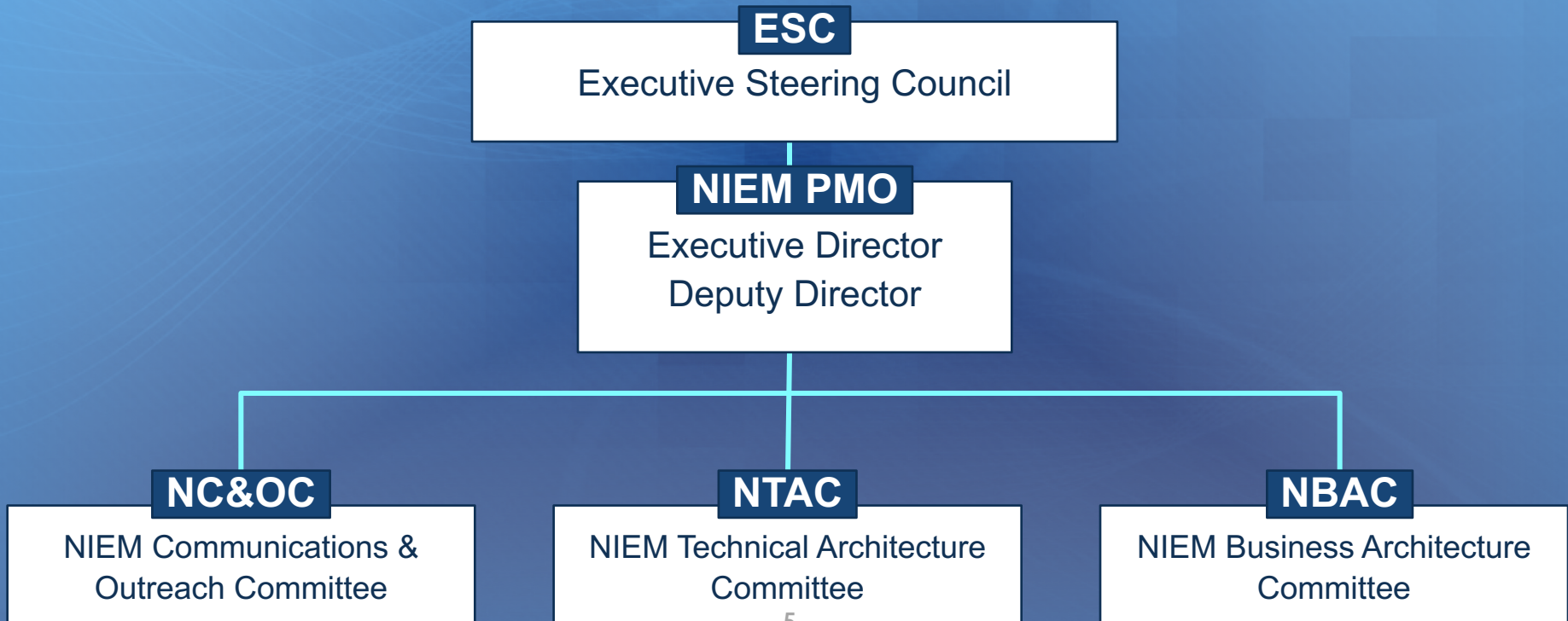


Built and governed by the business users at Federal, State, Local, Tribal and Private Sectors

NIEM Governing Structure

NIEM's governing structure is comprised of *Federal, State, Local, Tribal and private organizations*

NIEM is jointly managed at an executive level by the Department of Homeland Security (DHS), Department of Justice (DOJ), and Department of Health and Human Services (HHS)



Who governs NIEM Domains?

Domain	Executive Steward
Justice	Global Justice (State & Local)
Screening	DHS Screening Coordination Office
Immigration	DHS/ICE & USCIS
CBRN	DHS/DNDO
Maritime	DOD/DON/MDA
Cyber	DHS/NPPD/CS&C
Family Services	HHS/ACFS & DOJ
Emergency Management	DHS/FEMA, DHS/S&T (state & local)
Infrastructure Protection	DHS/NPPD
International Trade	DHS/CBP
Biometrics	DHS/NPPD, DOJ/FBI, DOD, NIST
*Health	HHS/ONC & HHS/OCIO
*Human Services	HHS/ACFS & NYC/HHS
*Financial (Budget, Planning, Accountability, Grants)	TBD (currently HHS, OMB)

NIEM Value Proposition

Value Proposition - Standardization

The formalization of NIEM as a standard enables:

Community of Support

NIEM Practitioners can leverage information sharing practitioners to decrease development time for exchanges and increase conformance



Structured Approach

Repeatable approach that decreases the inconsistencies and duration of development

Value to Organizations: A larger community working with and developing agreed upon semantics combined with a structured approach can increase data compatibility between agencies, cost avoidance by building reusability of exchanges, and ease the development of information exchanges.

Value Proposition - Interoperability

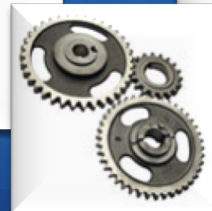
NIEM facilitates interoperability through the use of:

Common Language and Vocabulary

Eliminates confusion by providing consistency of data definitions between agencies

Agnostic Implementation

NIEM does not dictate how agencies' systems are implemented, but enables these systems to work together



Value to Organizations: Interoperability is the ability of many diverse systems to work together. By increasing interoperability between mission areas and jurisdictions, government can enhance its services across key functional areas such as law enforcement and emergency response.

Example: FBI NIBRS

Define data
components

Discover NIEM
coverage

Expand NIEM
if needed

Create NIEM
IEPD

Law
enforcement
RMS

Extract NIBRS
Data

Share with FBI

Value Proposition - Reusability

The reuse of IEPDs, in part and whole, within NIEM will:

Decrease Development Time

Decrease the development time for information exchanges that use similar sets of data

Increase Consistency

Allows practitioners to increase the level of consistency in data definitions across their information exchanges



Value to Organizations: Reuse through NIEM can help organizations avoid costs associated with the development and maintenance of information exchanges, leading to an increased budget available to spend in mission areas

**Explore the resources at
www.niem.gov**

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